Appendix C. Survey of Other States

STATE INFORMATION			
Name	**Illinois**	**Annual Births**	180,000
Contact	Steve Perry	**Annual Deaths**	105,000
V.R. Offices	1 State Vital Records Office, 102 County Clerks		
AUTOMATION STATUS			
	RFP for new system will be published August 2002. Have legacy mainframe system from 1985 and EBC from 1997.		
SYSTEM INFORMATION			
Vendor		**System Name**	
Implementation	• RFP took 1 year to create with several full-time staff and a consultant. • Contract should be signed and planning will begin by end of 2002. • Plan to implement customer service, local registrar access, and birth modules by Jan. 2004. • Death and marriage modules will follow.	**Database access, data submission**	Will be purchasing a Web-based system. Data will be entered into the system by filing party. Not sure how they will collect medical certification information for death certificates yet
Security	System will incorporate current Internet and database security including data encryption. Plan to assign ID's and PINs to users but are looking into biometric verification of users, depending on cost.	**Data Available**	Have 17 years of birth abstract information and 5 years of full birth information from legacy systems.
Modification, Customization, Maintenance			
COST			
Total	Total budget for implementation is $2,000,000 over 2 years.	**Maintenance**	
Planning		**Convert data**	
Software		**Connectivity**	
Customization		**Other**	
Hardware			
Comments	Illinois has been requesting a fee increase to improve automation for 7 years. Finally got budget approval from Governor in 2001.		

STATE INFORMATION			
Name	**Iowa**	**Annual Births**	36,000
Contact	Jill France	**Annual Deaths**	28,000
V.R. Offices	1 State Vital Records Office, 99 County Recorders		
AUTOMATION STATUS			
	Planning in-house redesign of legacy EBC system.		
SYSTEM INFORMATION			
Vendor	In-house staff	**System Name**	
Implementation	• Legacy EBC implemented as Client Server system in 1995. EBC files records but does not allow amendment or issuance tracking. • Implemented in-house automated indexes and request tracking in 1999. • Legacy EBC to become Internet-based with 2003 standard birth certificate on January 1, 2003.	**Database access, data submission**	Births entered electronically by the hospital to State office. All other record indexes entered by State staff. Local registrars do not have access to State systems but some have in-house electronic indexes and scanned records.
Security	• Assigned user ID's and passwords • Encrypted, secure Internet transmission including custom browser for hospitals • Database security and control	**Data Available**	• Birth abstract 1930-present and death abstract 1954-present but not issuing this format yet. • Full birth data 1995-present
Modification, Customization, Maintenance	In-house		
COST			
Total		**Maintenance**	In-house
Planning	$2 million to plan system with vendor – not implemented.	**Convert data**	$2 million to key abstract information for births and deaths.
Software		**Connectivity**	
Customization	In-house	**Other**	
Hardware	Currently using existing hardware but will need to buy new server and licenses next year. No cost estimate yet.		
Comments	Began planning a new system with a vendor in 1995 but vendor went bankrupt and system was not implemented. In-house staff determined they could update legacy EBC for less cost than new system.		

STATE INFORMATION			
Name	**Michigan**	**Annual Births**	133,000
Contact	Carol Getts	**Annual Deaths**	86,000
V.R. Offices	1 State Vital Records Office, 83 County Clerks, 26 City Clerks		
AUTOMATION STATUS			
	Implemented EBC (IBIS) in 1993 and purchased new amendment/issuance system in 2000.		
SYSTEM INFORMATION			
Vendor	VitalChek	**System Name**	Vital Vision
Implementation	• Planning began in 1999 with purchase in 2000. • Implemented certificate issuance, amendment, tracking, and accounting functions in March 2001. System integrates with VitalChek online ordering and allows electronic request processing.	**Database access, data submission**	• Requests entered into the system by staff or directly from the customer via the Internet. Internet ordering incorporates online data edits. Requests keyed by staff are reviewed for acceptability by the system and, if a request is not acceptable, a reject letter is automatically printed. If the requested record is available online, it is automatically printed with a mailing or shipping label. • 99 % of births are entered electronically by the hospital into legacy IBIS system. • 40-50% of requests for copies come from the Internet. • Other than the Central Birth Registry, local registrars cannot access the system but this is being worked on.
Security	• Data encryption. • User ID's and passwords (PIN #) • User tracking • Addresses of credit card orders verified by VitalChek • Fraud-alert tracks addresses, applicants, and records issued.	**Data Available**	• Full birth 1989-present • Birth index 1916-1949 • Birth abstract 1867-1949 • Death abstract 1993-present but not issuing this format yet
Modification, Customization, Maintenance	Have maintenance agreement with vendor but most customizations can be done in-house.		
COST			
Total	Cost information not available	**Maintenance**	
Planning		**Convert data**	
Software		**Connectivity**	
Customization		**Other**	
Hardware			
Comments	• Found implementing this system through the State's IT staff difficult since they did not work well with the vendor. • Modular implementation is easier than large-scale changes. • Implementation was difficult since money was eliminated from the budget after purchase.		

STATE INFORMATION			
Name	**Minnesota**	**Annual Births**	65,000
Contact	Barbara Bednarczyk	**Annual Deaths**	37,000
V.R. Offices	1 State Vital Records Office, 97 County Registrars		
AUTOMATION STATUS			
	System purchased in 1997.		
SYSTEM INFORMATION			
Vendor	Mantech	**System Name**	MN Vital Records Vision 2002 (MNVRV 2000)
Implementation	• Statewide needs analysis conducted in 1993. • RFP published and comprehensive software package purchased in 1997. • Birth, Death, and Fetal Death registration, issuance, and amendment portions rolled out to State & local registrars and hospitals in 2000. • Death registration rolled out to funeral directors in 2002. • As part of the pilot, death registration is available to 2 Medical Examiners (Ramsey and Hennepin Counties). Should be available to all Coroners/MEs and physicians by early 2003.	**Database access, data submission**	**Birth and Fetal Death: All hospitals submit births and fetal deaths electronically to the system, which are then immediately available to both the State and local offices.** Death: Funeral directors and medical certifiers with access complete online data submission. Funeral directors without access give paper worksheet to local registrars to enter data, including medical certification information. This has caused delays and errors in some counties, particularly the urban ones. If the funeral director has access but the medical certifier doesn't, the medical certification is entered by the State.
Security	Internet and database security include limited physical access, firewalls, data encryption, and printing controls. User activity is monitored and users are assigned IDs and passwords. System only allows access from and printing to certain IP addresses. System has automatic birth-death matching.	**Data Available**	Birth and death abstracts available for all records (keyed by the local registrars) Full birth records 2000 to present Full death records 2002 to present Local registrars issue statewide events
Modification, Customization, Maintenance	Most edits and features can be changed by in-house staff but code changes are done by vendor. Have maintenance contract with vendor.		
COST			
Total	Total budget $5,000,000 over 5 years, but not all spent.	**Maintenance**	
Planning	$1,400,000 includes staff positions	**Convert data**	
Software	$1,750,000 w/ customization, maintenance, conversion	**Connectivity**	$3,800
Customization		**Other**	$720,000
Hardware	$75,000		
Comments	• They had local offices enter historical data which caused discrepancies. Should have spent money to have vendor do data entry and conversion to save time and prevent errors. • They initially developed a client server system and would like to have been Web-based from the start. • They also would have required mandatory participation after a certain period of time.		

STATE INFORMATION			
Name	**Missouri**	**Annual Births**	36,000
Contact	Ivra Cross	**Annual Deaths**	28,000
V.R. Offices	1 State Vital Records Office, 114 County-level local registrars (All were Public Health Offices but switched vital records responsibilities to 2 Recorders of Deeds this year as part of pilot).		
AUTOMATION STATUS			
	Legacy mainframe system and EBC.		
SYSTEM INFORMATION			
Vendor	Genesis EBC, In-house mainframe system	**System Name**	
Implementation	• Have had current mainframe system for 15-20 years. • Implemented EBC w/ electronic registration, amendment, and issuance of births in 1989. • County Clerks electronically create and submit marriage licenses/certificates since 1999. • 2 Clerks of Courts electronically file dissolutions as pilot started this year.	**Database access, data submission**	• Births entered electronically by the hospital with remaining paper entered by State staff. • Although local registrars accept death certificates, only the three largest local offices retain paper files. All other locals have electronic access and issue abstracts only.
Security	• Data encryption • User ID's and passwords, • User access and activity tracking, • Security paper log.	**Data Available**	• Full birth 1989 to present • Abstract birth, death, marriage, and dissolution available to State and locals for all years • Locals issue statewide events.
Modification, Customization, Maintenance	Modifications and maintenance done by in-house staff. Minor code changes for Y2K done by to EBC by vendor.		
COST			
Total	Cost information not available	**Maintenance**	
Planning		**Convert data**	
Software		**Connectivity**	
Customization		**Other**	
Hardware			
Comments	Legacy systems working well although may have to upgrade if electronic death registration becomes the standard. May plan to integrate with VitalChek system in order to electronically accept Internet orders.		

STATE INFORMATION			
Name	**North Dakota**	**Annual Births**	8,000
Contact	Darren Mischke	**Annual Deaths**	6,000
V.R. Offices	1 State Vital Records Office, No local registrars		
AUTOMATION STATUS			
	No plans to upgrade legacy system from 1995.		
SYSTEM INFORMATION			
Vendor	In-house and VitalChek	**System Name**	
Implementation	Implementation complete.	**Database access, data submission**	Birth and Death: A paper record is completed by the filing party and sent to the State Vital Records Office where it is reviewed, scanned, and an index is data-entered by staff (2 data entry people). Do not file marriage or divorce records. Requests: Customer requests are accepted in person, by fax, e-mail, and Internet and processed through VitalChek. Online orders account for 35% of total issuance.
Security	• Internet security provided by VitalChek. • No external access to in-house databases. • Database security done by State. Staff are assigned unique ID's and passwords. User activity can be tracked.	**Data Available**	Birth and death records scanned from 1995 through the present. Other records remain on paper.
Modification, Customization, Maintenance	In-house staff		
COST			
Total	Total cost estimated at $100,000	**Maintenance**	
Planning		**Convert data**	
Software		**Connectivity**	
Customization		**Other**	
Hardware			
Comments	Because ND files relatively few records and has no local registrars, they have no plans to upgrade their current system. Filing parties have not yet expressed interest in online registration.		

STATE INFORMATION			
Name	**South Dakota**	**Annual Births**	10,000
Contact	Kathi Mueller	**Annual Deaths**	7,000
V.R. Offices	1 State Vital Records Office, 64 local registrars (County Registers of Deeds)		
AUTOMATION STATUS			
	Purchased system March 2001.		
SYSTEM INFORMATION			
Vendor	QS Technologies	**System Name**	
Implementation	• Spent 1-1/2 years developing the RFP before publication with full-time project manager. • Contract signed March 2001. • Local registrar access; birth, metabolic and hearing; and customer service modules rolled out February 2002. • Plan to integrate system with existing VitalChek system in July 2002. • Marriage module scheduled to implement August 2002. • Death module will take 1 to 2 years to plan before implementation.	**Database access, data submission**	Local Access and full customer service module: Client server system. Locals can issue any record on system – currently just statewide birth but will include death and marriage when those modules available. Birth, Metabolic, and Hearing: Online data submission (Citrix) from hospital. Marriage: License issued by local registrar. Information will be collected from couple and entered into system, and couple will sign license printed from system. After marriage, the completed license will be filed with the local registrar and the rest of the information will be entered into the system. Issuance: Internet orders handled by VitalChek.
Security	• Standard Internet security including data encryption. • Standard database security. • Users assigned ID's and passwords. • Addresses of Internet orders verified by VitalChek system.	**Data Available**	• Birth abstract from earliest through 1994. • Full birth 1995-present • Marriage abstract 1960-present
Modification, Customization, Maintenance	In-house staff can make almost all changes since system is table-based. Vendor makes changes in code. Maintenance contract with vendor includes 2 full-time staff on-site.		
COST			
Total	$1,200,000.	**Maintenance**	
Planning		**Convert data**	
Software	Birth, metabolic, hearing, and marriage modules including customization $300,000. Plan to spend $150,000 developing and implementing death and fetal death modules.	**Connectivity**	
Customization		**Other**	
Hardware	Purchased a computer, license, and connectivity for each local office. $160,000.		
Comments	They had difficulties coordinating with other agency and state IT staff but worked out problems during planning. Are looking into having medical certification information collected from physician with PDA's.		

STATE INFORMATION			
Name	**Wisconsin (for comparison)**	Annual Births	68,000
Contact		Annual Deaths	46,000
V.R. Offices	1 State Vital Records Office, 72 County Registers of Deeds, 2 City Health Offices		
AUTOMATION STATUS			
	Legacy mainframe system from 1979 and EBC from 1994.		
SYSTEM INFORMATION			
Vendor		**System Name**	
Implementation	Data Age developed submission for EBC by amendments, reports, and issuance handled in house. Mainframe developed in house.	**Database access, data submission**	Births: Hospitals enter births electronically to State using EBC but local registrars do not have access. Paper certificates mailed to local registrars. Remaining paper births and all amendments entered by State staff. EBC data downloaded daily in mainframe system which 11 local registrars can access to issue abstracts. Death and Marriage: Paper certificates filed with local registrars and mailed to State. State staff key statistical information and indexes into mainframe system.
Security		**Data Available**	Birth index 1948-1978, birth abstract 1979-present Full birth from 1994-present Death index 1959-present Marriage index 1973-present Divorce index 1987-present
Modification, Customization, Maintenance	Modifications and maintenance done by in-house staff.		
COST			
Total		**Maintenance**	
Planning		**Convert data**	
Software		**Connectivity**	
Customization		**Other**	
Hardware			
Comments			